

RECOMMENDATIONS FROM THE
INCINERATOR WORK GROUP ON SECTION 112
SUBCATEGORIES

Submitted to:

ICCR Coordinating Committee
Fort Collins, CO

April 28, 1998

MEMORANDUM

To: Coordinating Committee
From: Incinerator Work Group
Date: April 17, 1998
Subject: Halogenated Offgas Incineration Recommendation

Recommendation

Manufacturing processes and equipment which emit halogenated gases and the air pollution control devices which combust those halogenated offgases have been addressed under New Source Performance Standards and existing MACT rules. Additional EPA MACT rule development efforts currently underway will address the need for halogenated offgas combustion control requirements for processes not covered by the existing rules. The Incinerator Work Group recommends that the ICCR not focus its resources on halogenated offgas incineration.

Background

The halogenated offgas category includes incineration of gas streams emitted from manufacturing processes that contain halogenated materials. These streams include process vents and emissions from storage vessels, transfer operations, waste management units, and equipment leaks. Halogenated gases generated by the incineration of solid wastes are not included in the halogenated offgas category, and they will be addressed by the IWG as part of its section 129 rulemaking recommendations.

Based on the ICCR inventory database and the knowledge of the workgroup, halogenated offgas streams are mostly present in the halogenated solvent cleaning, paper, chemical, and pharmaceutical industries.

Each of these industries is addressed or is scheduled to be addressed by MACT rules. The paper industry cluster rule has been promulgated. The pharmaceutical MACT is expected to be finalized shortly. The final Halogenated Solvent Cleaning MACT addresses parts cleaning operations. The Hazardous Organic NESHAP and the Polymer and Resin MACT rules have addressed halogenated offgas combustion from a large proportion of the chemical and polymer industries. Other chemical and polymer industry processes are being considered in a variety of year 2000 MACT rulemakings.

MEMORANDUM

To: Coordinating Committee
From: Incinerator Work Group
Date: April 17, 1998
Subject: Landfill Gas Flares Recommendation

Recommendation

Landfill gas is regulated under the New Source Performance Standards and Emission Guidelines (NSPS/EG) for municipal solid waste (MSW) landfills. Additional regulation of landfill gas is being addressed under the recently initiated EPA MACT Rulemaking for MSW landfills. The Incinerator Work Group recommends that landfill gas flares be referred to EPA and that the ICCR not focus further resources on landfill gas flares.

Background

During the anaerobic degradation of materials in MSW landfills, gases are generated that may be released to the atmosphere. To mitigate these emissions, the EPA requires that systems be installed and operated to collect and treat the gas. A gas flare is commonly employed as a primary control device or as a backup to power generating units.

The combustion of landfill gas provides substantial environmental benefits because the methane is converted to carbon dioxide. As a "greenhouse" gas, methane's potency on a weight basis is over twenty fold that of carbon dioxide. This was recognized in the President's *Climate Change Action Plan* which specifically states that landfill gas be collected and destroyed.

Landfill gas and gas flares are addressed under various Clean Air Act sections including:

Section 129 Requirements. Section 129 applies to "solid waste combustion." Because solid waste is defined to exclude gases (except gases which are in containers), Section 129 does not apply to landfill gas flares.

Section 112 Requirements. MSW landfills are listed as a Section 112 category, but landfill gas flares are not. Landfill gas flares are identified as a control device within existing NSPS/EG for HAP emissions, and these standards and guidelines include performance criteria for these flares.

Section 111 Requirements. Performance criteria for landfill gas flares are included in the NSPS/EG regulations for MSW landfills.

The workgroup believes that landfill gas flares be referred to EPA for consideration in these non-ICCR rulemakings and that the ICCR should not focus any resources on landfill gas flares.

MEMORANDUM

To: Coordinating Committee
From: Incinerator Work Group
Date: April 17, 1998
Subject: Scrap Metal Recovery Units Recommendation

Recommendation

Scrap metal recovery units are specifically excluded from the definition of solid waste incineration unit in Section 129. Certain types of scrap metal recovery units (Pb and Al) are already being addressed under Section 112 MACT rulemakings. In addition, at least in the cases of copper wire and steel, mechanical processes such as chopping, shredding, and classifying are replacing combustion as the recovery technique. The Incinerator Work Group (IWG) recommends that all scrap metal recovery units be referred to EPA for MACT rulemakings as deemed appropriate by the EPA and not receive further consideration in the ICCR process.

Background

The IWG's subteam #4 has identified a number of different types of scrap metal recovery units in the ICCR database. The metals recovered in the listed units include copper, lead, aluminum, ferrous, and precious metals. Some smelt or sweat out the metal from the unwanted combustible or noncombustible matrix; others simply burn off the combustible insulation or coatings. In many cases, these units are area sources of HAP emissions.

The secondary environmental benefits of scrap metal recovery are not inconsistent with EPA's statements in support of recycling and overall environmental benefits. For example, the EPA has identified many benefits when scrap iron and steel are used instead of virgin materials (iron ore and coal) to make new steel, including: total air pollution emissions drop 86%, water effluent discharges fall 76%, water use is reduced 40%, and mining wastes are reduced by 97%. Similarly, using recycled aluminum or copper scrap rather than virgin ore reduces energy use by 95% and 85% respectively. Clearly regulation of these types of sources should take a life-cycle view rather than focus solely on the combustion that may be involved.

Section Applicability

The following addresses how scrap metal recovery units are considered under the various regulations.

Applicability of Section 129 Requirements

Section 129 of the Act applies to "solid waste combustion." The IWG believes that the combustible materials that are fed to scrap metal recovery units may be classified as solid wastes. However, Section 129(g)(1) contains a number of explicit exclusions from the definition of "Solid Waste Incineration Unit" and reads, in part, "... *The term 'solid waste incineration unit' does not*

include (A) materials recovery facilities (including primary or secondary smelters) which combust waste for the primary purpose of recovering metals, (B) ... ‘ [italics added] 42 U.S.C.A. §7429(g)(1). Therefore, scrap metal recovery units are not solid waste incineration units, and Section 129 does not apply.

Applicability of Section 112 Requirements

As mentioned above, secondary lead and secondary aluminum production MACT standards have been or are being promulgated. Secondary lead smelters produce lead metal from scrap and provide the primary means for recycling lead-acid automotive batteries. The secondary lead smelter MACT standard was promulgated on May 31, 1994, and covers area as well as major sources of HAPs. The secondary aluminum production MACT standard is expected to be promulgated in 1998. It will cover major HAP sources only.

According to the Section 112(c)(6) emission inventory, 75% of secondary copper smelters are considered to be area sources of HAPs. Copper recovery units as well as precious metal recovery units are recommended to EPA for consideration for MACT development outside the ICCR process.

Conclusion

Scrap metal recovery units are excluded from Section 129. Two types of scrap metal recovery units (Pb and Al) are currently listed in Section 112 as source categories for MACT development. Another type (Cu) has been inventoried and may be addressed in a non-ICCR rulemaking. Since EPA has built expertise outside the ICCR process in dealing with secondary metal recovery units, the IWG recommends that the ICCR give secondary metal recovery units no further consideration.